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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/933,527	08/20/2001	Robert V. Norby	1095-1068.1	5832
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Lee, Mann, Smith, McWilliams, Sweeney & Ohlson P.O. Box 2786 Chicago, IL 60690-2786			EXAMINER MCCARRY JR, ROBERT J	
			ART UNIT 3617	PAPER NUMBER

DATE MAILED: 06/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/933,527

Applicant(s)

NORBY ET AL.

Examiner

Robert J. McCarry, Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.  
4a) Of the above claim(s) 8-15, 20 and 21 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16, 17, 19 and 22 is/are allowed.
- 6) ☒ Claim(s) 1-7 and 18 is/are rejected.
- 7) ☒ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 June 2002 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

### **DETAILED ACTION**

The Response to the Restriction requirement stated that the applicant elected the apparatus claims of group one which included 1-7. Group one listed in the Restriction requirement listed claims 1-7 and 16-22 as group one and claims 8-15 as group two. Claims 1-7 and 16-22 have been examined and claims 8-15 have been removed from consideration. Claims 20 and 21 have also been removed from consideration since the applicant has stated that they were originally erroneously numbered and show no actual claims.

The Examiner has accepted the Drawing corrections filed on 6/19/02.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-7 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the fully sheared weld" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the weld collar" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim 18 recites the limitation "the sheared weld collar" in lines 5-6. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Objections***

Claim 7 is objected to because of the following informalities: claim 7 depends from claim 7. For examining purposes the Examiner has read this claim to be dependent from claim 4 since it is written similarly to claim 6, which is also dependent from claim 4.

Claim 18 is objected to because of the following informalities: claim 18 recites the term "sheared weld collar (flash)". The use of parenthesis in the claim is redundant. The claims would be better written if the parentheses were removed and either the term "flash" or "weld collar" was used.

Claim 22 is objected to because of the following informalities: Claim 22 is dependent from claim 21, which, as stated by applicant was erroneously numbered. For examining purposes the Examiner has read claim 22 to be dependent from claim 19. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thelen et al (US 6,396,020) in view of Clews et al (US 4,147,913) further in view of Theurer et al (US 4,983,801).

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Thelen et al discloses a rail welding device comprised of a pair of quadrants 294 which make up a cooling box 310. The cooling box is designed to contain the weld collar flash and debris of the weld. The Examiner has read the firebox of the present application to serve as a containment device for the welding device. Therefore the cooling box of the previous patent and the firebox of the present invention are understood to be the same part. A push rod and shaft assembly actuates the quadrants of the cooling box to surround the track. This assembly is described in column 3 lines 43-61.

Thelen et al discloses a welding system as described above. However Thelen et al does not show the use of a shear die as part of the quadrants applied to the rail. Clews et al discloses a welding assembly using shear dies to prep adjacent surfaces of parts prior to the application of a rail. It would have been obvious to one of ordinary skill in the art to have applied the use of shear dies, like that of Clews et al, to a welding assembly, like that of Thelen et al in order to insure the safe and proper application of welds to rails used on a major transit system.

Thelen et al discloses a welding system as described above. However Thelen et al does not show a device for applying a force to the rails to pull and align them together for the weld. Theurer et al (US 4,983,801) discloses a device for tensioning rails to reduce the gap between adjacent rails. It would have been obvious to one of ordinary skill in the art to have applied a rail tensioning device, like that of Theurer et al, to a welding assembly, like that of Thelen et al in order to insure that the rails were in proper positioning so that the weld will be properly applied.

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Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thelen et al in view of Theurer (US 4,272,664).

Thelen et al discloses a welding assembly as described above. However, Thelen et al does not disclose the use of flash butt welding. Theurer discloses a welding assembly that specifically uses flash butt welding. It would have been an obvious design choice to one of ordinary skill in the art to use flash butt welding as an alternative to the arc welding or gas welding presently in use.

### ***Allowable Subject Matter***

Claims 6, 7 and 18 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claims 16, 17, 19 and 22 are allowed.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert J. McCarry, Jr. whose telephone number is (703) 305-0581. The examiner can normally be reached on Monday through Friday 8:00am to 5:00pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, S. Joseph Morano can be reached on (703) 308-0230. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RJM

June 23, 2004

  
ROBERT J. McCARRY, JR.  
PATENT EXAMINER  
387  
6/23/04